

FAILURE TO THRIVE

The first few years of life are a time when most children gain weight and grow much more rapidly than they will later on. Sometimes, however, babies and children don't meet expected standards of growth. Although most of these children follow growth patterns that are variations of normal, others are considered to have "failure to thrive."

This is a general diagnosis, with many possible causes. Common to all cases, though, is the failure to gain weight as expected, which is often accompanied by poor height growth. Diagnosing and treating a child who fails to thrive focuses on identifying any underlying problem. From there, doctors and the family work together to get the child back into a healthy growth pattern.

What Is Failure to Thrive?

Although it's been recognized for more than a century, failure to thrive lacks a precise definition, in part because it describes a condition rather than a specific disease. Children who fail to thrive don't receive or are unable to take in, retain, or utilize the calories needed to gain weight and grow as expected.

Most diagnoses of failure to thrive are made in infants and toddlers - in the first few years of life - a crucial period of physical and mental development. After birth, a child's brain grows as much in the first year as it will grow during the rest of the child's life. Poor nutrition during this period can have permanent negative effects on a child's mental development.

Whereas the average term baby doubles his or her birth weight by 4 months and triples it at 1 year, children with failure to thrive often don't meet those milestones. Sometimes, a child who starts out "plump" and who shows signs of growing well can begin to fall off in weight gain. After a while, linear (height) growth may slow as well.

If the condition progresses, the undernourished child may:

- become disinterested in his or her surroundings
- avoid eye contact
- become irritable
- not reach developmental milestones like sitting up, walking, and talking at the usual age

What Causes It?

Failure to thrive can result from a wide variety of underlying causes. Some children fail to thrive because of:

- **Social factors.** In some cases, doctors may not identify a medical problem, but may find that the parents are actually *causing* the failure to thrive. For example, some parents inappropriately restrict the amount of calories they give their infants. They may fear their child will get fat or put him or her on a limited diet similar to one they follow. Or, they may simply not feed the child enough either because of a lack of interest or because there are too many distractions in the household, which contributes to the neglect of the child. Living in poverty can also lead to an inability to provide a child with the necessary nutritional requirements.
- **Conditions involving the gastrointestinal system** like gastro esophageal reflux, chronic diarrhea, cystic fibrosis, chronic liver disease, and celiac disease. With reflux, the esophagus may become so irritated that the child refuses to eat because it hurts. Persistent diarrhea can interfere with the body's ability to hold on to the nutrients and calories from food that's eaten.

Cystic fibrosis, chronic liver disease, and celiac disease are conditions that limit the body's ability to absorb nutrients. These are known as **malabsorptive disorders** - the infant may eat a lot, but his or her body doesn't absorb and retain enough of that food. Celiac disease results from sensitivity to a dietary protein found in wheat and certain other grains. The immune system's abnormal response to this protein causes damage to the lining of the intestine, interfering with its ability to absorb nutrients.

- **A chronic illness or medical disorder.** If a child has trouble eating - because of prematurity or a cleft lip or palate, for example - he or she may not take in enough calories to support normal growth. Other conditions that can lead to failure to thrive would include cardiac, endocrinologic, and respiratory disorders. These disorders can increase the child's caloric needs so that it becomes difficult to keep up with them.
- **An intolerance of milk protein.** This condition can initially lead to difficulty with absorbing nutrients until it's recognized. It can also put an entire class of food out of reach, restricting the child's diet and occasionally leading to failure to thrive.

- **Infections** (parasites, urinary tract infections, tuberculosis, etc.), which place great energy demands on the body and force it to use nutrients rapidly (and the appetite may be impaired as well), sometimes bringing about short- or long-term failure to thrive.
- **Metabolic disorders**, which can also limit a child's capacity to make the most of calories consumed. Metabolic disorders might make it difficult for the body to break down, process, or derive energy from food, or they can cause a buildup of toxins during the breakdown process, which can make the child feed poorly or vomit.

In some cases, doctors are unable to pinpoint a specific cause.

Although doctors in the past tended to categorize cases of failure to thrive as either organic (caused by an underlying medical disorder) or inorganic (caused by caregivers' or parents' actions), they're less likely to make such sharp distinctions today. That's because medical and behavioral causes often appear together.

For instance, if a baby has severe reflux and is reluctant to eat, feeding times can be stressful for a caregiver. He or she may become tense and frustrated, and this may make it difficult for the caregiver to sustain attempts to feed the child adequate amounts of food.

How Is It Diagnosed?

Many normal babies go through brief periods when their weight gain plateaus or they even lose a little weight. However, if a baby doesn't gain weight for 3 consecutive months during the first year of life, doctors usually become concerned.

Doctors diagnose failure to thrive by using standard growth charts to plot the child's weight, length, and head circumference, which are measured at each well-baby exam. Children who fall below a certain weight range for their age or who are failing to gain weight at the expected rate will likely be evaluated further to determine if there's a problem.

Along with obtaining a thorough medical and feeding history and performing a detailed physical examination, the doctor may order a complete blood count, urinalysis, and various blood chemical and electrolyte tests that can be helpful in the search for underlying medical problems. If the doctor suspects a particular disease or disorder as a possible cause, he or she may perform additional specific tests to identify that condition.

To determine whether the child is receiving enough food, the child's doctor (sometimes with the help of a dietitian) will do a calorie count after asking the parents what the child eats every day. And talking to the parents can help a doctor identify any problems at home, such as neglect, poverty, household stress, or feeding difficulties.

How Is It Treated?

Children with failure to thrive need the help of their parents and a doctor. Sometimes, an entire medical team will work on the child's case.

In addition to the child's primary doctor, the team might include a nutritionist to evaluate the child's dietary needs and an occupational or speech therapist to help the caregiver and child develop successful feeding behaviors and address any sucking or swallowing problems the child might have. Occupational and speech therapists are often helpful because of their expertise in the muscular control that's involved in eating.

Because treatment of failure to thrive involves treating any disease or disorder causing the problem, specialists such as a cardiologist, neurologist, or gastroenterologist may also be part of the care team.

Particularly in cases of failure to thrive that are thought to be caused by caregivers' or parents' actions, a social worker and a psychologist or other mental health professional may help address problems in the child's home environment and provide any needed support.

Often, in cases of poor nutrition, the treatment can be carried out at home, with frequent follow-up visits to the doctor's office or clinic. The doctor will recommend high-calorie foods and place an infant on a high-calorie formula.

More severe cases may call for tube feedings in which a tube is put in that runs from the nose into the stomach. Liquid nutrition is provided at a steady rate through the tube. Once the tube is put in place, the child is usually fed at night, so as not to interfere with his or her activities or limit the child's desire to eat during the day. (About half of a child's caloric needs can be delivered at night through a continuous drip.) Once the child is more adequately nourished, he or she will feel better and will probably start to eat more on his or her own. At that point, the tube can be removed.

A child with extreme failure to thrive may need to be hospitalized so that he or she can be fed and monitored continuously. During this time, any possible underlying causes of the condition can be evaluated and treated appropriately. This also gives the treatment team the opportunity to observe firsthand the caregiver's feeding technique and the interaction between caregiver and child during feedings and at other times.

How long treatment lasts varies significantly from case to case. Weight gain takes time, so several months may pass before a child is back in the normal range for his or her age. Children who require hospitalization may stay for 10 to 14 days or more to establish satisfactory weight gain, but it can be many months until the symptoms of severe malnutrition are no longer present. Failure to thrive caused by a chronic illness or disorder may have to be monitored periodically and treated for even longer, perhaps for a lifetime.

Does My Child Have Failure to Thrive?

If you're worried that your child is failing to thrive, remember that there are many reasons why he or she might be slower to gain weight *other than* failure to thrive. For instance, breastfed babies and bottle-fed babies often gain weight at different rates in the early newborn period.

Genetics also play a big role in weight gain, so if you and your spouse are slim, your baby may not put on pounds quickly. However, infants should still gain weight steadily and it can be difficult to monitor this from home. So, it's important to see your child's doctor on a regular basis.

As a guideline, babies usually eat eight to 12 times in a 24-hour period (a couple of ounces [60 milliliters] every few hours) in the first weeks after birth. By the time they're 2 to 3 months old, the number of feedings has dropped to six to eight, but the amount they eat each time has increased. At 4 months, about 30 ounces (890 milliliters) a day provides sufficient nutrition for most bottle-fed infants.

Your child's doctor will have plenty of opportunities to identify a problem at regular well-baby checkups. You can also periodically check your baby's weight at home, if you feel you need the reassurance.

When Should I Call My Child's Doctor?

If you notice a drop in weight gain or your baby doesn't seem to have a normal appetite, get in touch with your child's doctor. Any major change in eating pattern also warrants a call to the

doctor. Toddlers and other kids may have days and sometimes weeks when they show little interest in eating, but that shouldn't happen in infants.

If you have trouble feeding your baby, your child's doctor can offer some advice. For any reason, when a child doesn't readily eat, parents tend to become frustrated and feel they aren't taking care of their child well. That can magnify the problem and increase the stress for both you and your baby. Instead, get help for both of you by consulting your child's doctor.

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